

## ABSTRACT

Please add the following abstract:

Controlling the production of a liquefied natural gas comprising measuring the temperature and the flow rate of the liquefied natural gas; maintaining the flow rate of the heavy mixed refrigerant at an operator manipulated set point, and determining the flow rate of the light mixed refrigerant from the flow rate of the heavy mixed refrigerant and an operator manipulated set point for the ratio of the flow rate of the heavy mixed refrigerant to the flow rate of the light mixed refrigerant; determining a dependent set point for the ratio of the flow rate of the liquefied natural gas to the flow rate of the heavy mixed refrigerant such that the temperature of the liquefied natural gas is maintained at an operator manipulated set point; determining a dependent set point for the flow rate of the liquefied natural gas from the dependent set point for the ratio of the flow rate of the liquefied natural gas product stream to the flow rate of the heavy mixed refrigerant and the flow rate of the heavy mixed refrigerant; and maintaining the flow rate of the liquefied natural gas at its dependent set point; and the flow rate of one of the refrigerants referred to above is the sum of the flow rates of this refrigerant to the heat exchangers.